Amendm nts to the Claims

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-43 (canceled)

Claim 44. (new) An isolated polynucleotide comprising:
(a) a nucleotide sequence encoding a gamma tocopherol methyltransferase having an amino acid sequence of at least 80% sequence identity, based on the Clustal method of alignment with pairwise alignment default parameters of KTUPLE=1, GAP PENALTY=3, WINDOW=5 and DIAGONALS SAVED=5, when compared to SEQ ID NO:28;
(b) the complement of the nucleotide sequence, wherein the complement and the nucleotide sequence have the same number of nucleotides and are 100% complementary.

Claim 45. (new) The polynucleotide of Claim 44, wherein the sequence identity is at least 85%.

Claim 46. (new) The polynucleotide of Claim 44, wherein the sequence identity is at least 90%.

Claim 47. (new) The polynucleotide of Claim 44, wherein the sequence identity is at least 95%.

Claim 48. (new) The polynucleotide of Claim 44, wherein the amino acid sequence of the gamma tocopherol methyltransferase comprises SEQ ID NO:28.

Claim 49. (new) The polynucleotide of Claim 44, wherein the polynucleotide comprises SEQ ID NO:27.

Claim 50. (new) An isolated nucleic acid molecule that encodes a plant gamma tocopherol methyltransferase and remains hybridized with the isolated polynucleotide of Claim 44 under a wash condition of 0.1X SSC, 0.1% SDS, and 65°C.

Claim 51. (new) A recombinant DNA construct comprising the polynucleotide of Claim 44 operably linked to at least one regulatory sequence.

Claim 52. (new) The recombinant DNA construct of Claim 51, wherein the recombinant DNA construct is an expression vector.

Claim 53. (new) A host cell comprising the recombinant DNA construct of Claim 51.

Claim 54. (new) The cell of Claim 53, wherein the cell is selected from the group consisting of a yeast cell, a bacterial cell, an insect cell, and a plant cell.

Claim 55. (new) A transgenic plant comprising the recombinant DNA construct of Claim 51.

Claim 56. (new) A method for transforming a cell comprising introducing into a cell the recombinant DNA construct of Claim 51.

Claim 57. (new) A method for producing a transgenic plant comprising: (a) transforming a plant cell with the recombinant DNA construct of Claim 51, and (b) regenerating a transgenic plant from the transformed plant cell.

Claim 58. (new) A vector comprising the polynucleotide of Claim 44.